**Amendments to the Specification:**

Please replace the paragraph beginning at page 9, line 24, with the following rewritten paragraph:

-- ~~(4)~~ (5) $I_{Total} = \sqrt{n} f(\epsilon)(Q^* K y / \epsilon)^{1/2} = \sqrt{n} I_s$ --

Please add the following new paragraph after the paragraph ending on line 12 of page 7:

--As shown in Fig. 2b, the electrodynamic Ion Funnel was operated in a vacuum produced by two root pumps, operating at 84 l/s and 110 l/s, respectively. The octapole was operated in a vacuum produced by a Turbo pump operating at 510 l/s. The Mass Analyzer was operated in a vacuum produced by a Turbo pump operating at 250 l/s. As will be apparent to those having skill in the art, the each of these pumps will generally create a successively larger vacuum as ions progress from the entrance of the instrument at the Multicapillary Inlet towards the Mass Analyzer. --